Liaoningopterus

Liaoningopterus, sometimes misspelled "Liaoningopteryx", was a genus of anhanguerid pterodactyloid pterosaur from the Barremian-Aptian-age Lower Cretaceous Jiufotang Formation of Chaoyang, Liaoning, China.

The genus was named in 2003 by Wang Xiaolin and Zhou Zhonghe. The type species is *Liaoningopterus gui*. The genus name is derived from Liaoning and a Latinised Greek *pteron*, "wing". The specific name honours Professor Gu Zhiwei, an invertebrate specialist who has pioneered the study of the Jehol Biota.

The genus is based on holotype IVPP V-13291, a crushed partial skull and skeleton including the jaws, teeth, a cervical vertebra, and bones of the finger supporting the wing. It was a large pterosaur — the largest known from China at the time of description — with a skull length estimated at 61 cm (24 in), and a wingspan estimated at five metres (16.4 ft). The skull was long and low, bearing low crests close to the tip of the beak on both lower and upper jaws. The snout crest was twelve centimetres long, was symmetrical in form and had a maximum height of seventeen millimetres. The edge of the upper jaw was very straight. The teeth were only found at the anterior end of the jaws. They were elongated but robust, generally increasing in size from the back to the front. The fourth tooth in the upper jaw is with a length of 81 millimetres the largest known for any pterosaur. It is exceptional in size compared to the other teeth of *Liaoningopterus* also, the longest tooth in the lower jaw having a length of 41 millimetres. Tooth length in the specimen is very variable, which the authors explained by the presence of recently erupted replacement teeth. There were twenty pairs of teeth in the upper jaws and thirteen or fourteen pairs in the lower jaws.

The preserved cervical vertebra has a centrum length of 46 millimetres and a centrum height of 34 millimetres. From the wing bones pieces of the first phalanx can be recognised which had an estimated total length of about fifty centimetres.

The authors described *Liaoningopterus* as being probably a piscivore, due to the long, pointed snout.[1]

Liaoningopterus

Temporal range: Early Cretaceous, 120 Ma

Pre€ € O S D C P T J K PgN

Scientific classification

Kingdom:	Animalia
Phylum:	Chordata
Order:	†Pterosauria
Suborder:	†Pterodactyloidea
Family:	†Anhangueridae
Genus:	†*Liaoningopterus* Wang & Zhou, 2003

Type species

†***Liaoningopterus gui***
Wang & Zhou, 2003

Contents

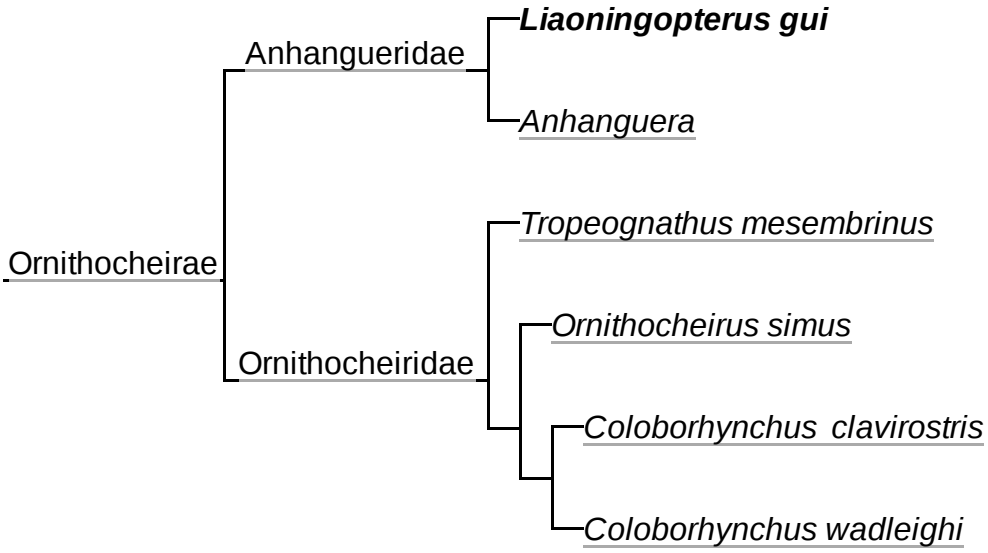
Classification
See also
References

External links

Classification

Wang classified *Liaoningopterus* as a member of the Anhangueridae, mainly because of the crests. This opinion was restated by him in 2005.[2] In 2006 Lü Junchang published a cladistic analysis showing *Liaoningopterus* to be a basal member of the Anhangueridae; in 2008 an analysis by Ji Qiang had *Liaoningopterus* in a trichotomy with *Anhanguera* and *Tropeognathus*.[3]

Below is a cladogram showing the phylogenetic placement of this genus within Ornithocheirae from Andres and Myers (2013).[4]



See also

- List of pterosaur genera
- Timeline of pterosaur research
- Pterosaur size

References

1. Wang X.-L. and Zhou Z.-H. (2003). Two new pterodactyloid pterosaurs from the Early Cretaceous Jiufotang Formation of Western Liaoning, China. *Vertebrata PalAsiatica* **41**(1):34-41.
2. Xiaolin Wang, Kellner, A.W.A., Zhonghe Zhou, and de Almeida Campos, D. (2005). Pterosaur diversity and faunal turnover in Cretaceous terrestrial ecosystems in China. *Nature* **437**:875-879.
3. Andres, B. and Ji Q., (2008), "A new pterosaur from the Liaoning Province of China, the phylogeny of Pterodactyloidea, and convergence in their cervical vertebrae", *Palaeontology* **51**(2): 453–469
4. Andres, B.; Myers, T. S. (2013). "Lone Star Pterosaurs". *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*. **103** (3–4): 383–398. doi:10.1017/S1755691013000303 (https://doi.org/10.1017%2FS1755691013000303).

External links

- *Liaoningopterus* (https://web.archive.org/web/20070923154702/http://archosauria.org/pterosauria/taxonomy/genera/liaoningopterus.html) in The Pterosauria

Retrieved from "https://en.wikipedia.org/w/index.php?title=Liaoningopterus&oldid=957219586"

This page was last edited on 17 May 2020, at 18:06 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.